

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
3 February 2005 (03.02.2005)

PCT

(10) International Publication Number
WO 2005/009690 A3

(51) International Patent Classification⁷: **B25J 9/02**

(21) International Application Number:
PCT/NL2004/000460

(22) International Filing Date: 29 June 2004 (29.06.2004)

(25) Filing Language: Dutch

(26) Publication Language: English

(30) Priority Data:
1023776 30 June 2003 (30.06.2003) NL

(71) Applicant (for all designated States except US):
ROBOXIS B.V. [NL/NL]; Valkseweg 92A, NL-3771
RG Barneveld (NL).

(72) Inventor; and

(75) Inventor/Applicant (for US only): **NEUTEL, Ronald,**
Walter [NL/NL]; Van Eesterenstraat 5, NL-3822 TD
Amersfoort (NL).

(74) Agent: **HOUBEN, C., W., H., F.**; Exter Polak & Charlouis
B.V., P.O.Box 3241, NL-2280 GE Rijswijk (NL).

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,

AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.

(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,
SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
GW, ML, MR, NE, SN, TD, TG).

Published:

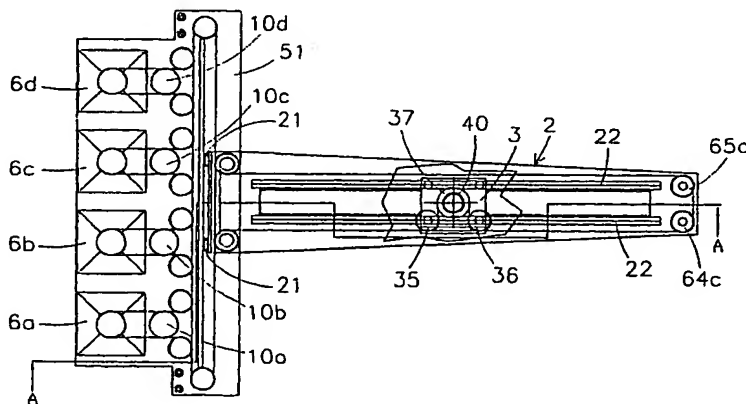
- with international search report
- before the expiration of the time limit for amending the
claims and to be republished in the event of receipt of
amendments

(88) Date of publication of the international search report:
17 March 2005

[Continued on next page]

BEST AVAILABLE COPY

(54) Title: **CARTESIAN COORDINATES TYPE ROBOT**



(57) Abstract: A robot for gripping and handling one or more objects, which robot comprises a stationary base (1) with a first guide extending in a first direction, and an arm (2) comprising a second guide (22) extending in a second direction at an angle relative to the first direction, preferably perpendicularly to the first direction, which arm (2) is connected to the base (1) by way of the first guide in such a way that the arm (2) is movable in the first direction. A slide (3) is provided on the second guide (22) and is movable in the second direction. A gripper (4) supported by the slide (3), for gripping one or more objects, is movable in a third direction intersecting the plane of the first and second directions, preferably perpendicularly. A number of stationary actuators (6a-6d) are provided on the base (1), for driving the arm (2), the slide (3) and the gripper (4) by means of pulling elements, for example drive belts (5a-5d), which are connected to the arm (2), the slide (3) and the gripper (4) respectively. The gripper (4) is situated in an imaginary plane extending in the second and third directions and intersecting the central longitudinal axis of the arm (2).

WO 2005/009690 A3



For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

BEST AVAILABLE COPY